59723
RS485 multi-protocol interface ACE969TP-2
Sepam series 20, 40, 60, 80

Main
Range of product
Sepam series 60
Sepam series 80 NPP
Sepam series 40
Sepam series 80
Sepam series 20

Device short name
ACE969TP-2

Complementary
Communication port protocol
DNP3 network: S-LAN interface: RS485 - 2-wire
IEC 60870-5-103 network: S-LAN interface: RS485 - 2-wire
Modbus RTU network: E-LAN interface: RS485 - 2-wire
Modbus RTU network: S-LAN interface: RS485 - 2-wire

Local signalling
Green LED for energized (front face)
LED for receiving data (front face)
LED for sending data (front face)
Red LED flashing for not set up or set up incorrect (front face)
Red LED off for set up and communication operational (front face)
Red LED remains ON for fault (front face)

Mounting mode
Fixed

Mounting support
Symmetrical DIN rail

Height
90 mm

Width
144 mm

Depth
52 mm

Product weight
0.285 kg

Mechanical robustness
Earthquakes in operation (level: 2) : 1 Gn (vertical axes) conforming to IEC 60255-21-3
Earthquakes in operation (level: 2) : 2 Gn (horizontal axes) conforming to IEC 60255-21-3
Jolts de-energized (level: 2) : 20 G/n/16 ms conforming to IEC 60255-21-2
Shocks de-energized (level: 2) : 30 G/n/11 ms conforming to IEC 60255-21-2
Shocks in operation (level: 2) : 10 G/n/11 ms conforming to IEC 60255-21-2
Vibrations de-energized (level: 2) : 2 G, 10 Hz...150 Hz conforming to IEC 60255-21-1
Vibrations in operation (level: 2) : 1 G, 10 Hz...150 Hz conforming to IEC 60255-21-1
Vibrations in operation (level: Fc) : 2 Hz...13.2 Hz, a = +/- 1 mm conforming to IEC 60068-2-6

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications.

16 Jan, 2020
### Maximum cable distance between devices

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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;180 m at 12 V DC</td>
<td>&lt;750 m at 24 V DC</td>
<td>&lt;160 m at 12 V DC</td>
<td>&lt;450 m at 24 V DC</td>
<td>&lt;125 m at 12 V DC</td>
<td>&lt;375 m at 24 V DC</td>
<td>&lt;1000 m at 24 V DC</td>
<td>&lt;320 m at 12 V DC</td>
</tr>
</tbody>
</table>

### Auxiliary connection terminal

- **Protective earth:** screw-type connector 1 pin(s) 1 cable(s) wire 2.5 mm² <3 m
- **Supply:** screw-type connector 2 pin(s) 1 cable(s) wire 0.2…2.5 mm²
- **Supply:** screw-type connector 2 pin(s) 1 cable(s) wire 1.5 mm²
- **Supply:** screw-type connector 2 pin(s) 1 cable(s) wire 2.5 mm²
- **Supply:** screw-type connector 2 pin(s) 2 cable(s) wire 0.2…1 mm²
- **Supply:** screw-type connector 2 pin(s) 2 cable(s) wire 1 mm²
- **Functional earth:** ring lug 1 pin(s) 1 cable(s)

### Wire stripping length

- **Supply:** 8 mm

### Environment

#### Electromagnetic compatibility

- **1 MHz damped oscillating wave:** (immunity tests-conducted disturbances), 2.5 kV MC and MD, conforming to ANSI C37.90.1
- **1 MHz damped oscillating wave:** (immunity tests-conducted disturbances), III, 2.5 kV MC, 1 kV MD, conforming to IEC 60255-22-1
- **100 kHz damped oscillating wave:** (immunity tests-conducted disturbances), 2.5 kV MC, 1 kV MD, conforming to IEC 61000-4-12
- **Conducted disturbance emission:** (emission tests), conforming to IEC 60255-25
- **Conducted disturbance emission:** (emission tests), B, conforming to EN 55022
- **Disturbing field emission:** (emission tests), conforming to IEC 60255-25
- **Electrostatic discharge:** (immunity tests-radiated disturbances), 8 kV air, 4 kV contact, conforming to ANSI C37.90.3
- **Electrostatic discharge:** (immunity tests-radiated disturbances), 8 kV air, 6 kV contact, conforming to IEC 60255-22-2
- **Fast transient bursts:** (immunity tests-conducted disturbances), 4kV, 2.5 kHz, conforming to ANSI C37.90.1
- **Fast transient bursts:** (immunity tests-conducted disturbances), A or B, 4kV, 2.5 kHz/2 kV, 5 kHz, conforming to IEC 60255-22-4
- **Fast transient bursts:** (immunity tests-conducted disturbances), IV, 4kV, 2.5 kHz, conforming to IEC 61000-4-4
- **Immunity to conducted RF disturbances:** (immunity tests-conducted disturbances), 10 V, conforming to IEC 60255-22-6
- **Immunity to magnetic fields at network frequency:** (immunity tests-radiated disturbances), IV, 30 A/m (continuous)-300 A/m (13 s), conforming to IEC 61000-4-8
- **Immunity to radiated fields:** (immunity tests-radiated disturbances), 10 V/m, 80 MHz...1 GHz, conforming to IEC 60255-22-3
- **Immunity to radiated fields:** (immunity tests-radiated disturbances), 35 V/m, 25 MHz...1 GHz, conforming to ANSI C37.90.2 (1995)
- **Surges:** (immunity tests-conducted disturbances), III, 2 kV MC, 1 kV MD, conforming to IEC 61000-4-5
- **Voltage interruptions:** (immunity tests-conducted disturbances), 100 %, 10 ms, conforming to IEC 60255-11

#### Climatic withstand

- **Influence of corrosion/gaz test 4 (in operation):** 21 days, 75 % RH, 25 °C, 0.01 ppm H2S, 0.2 ppm S02, 0.02 ppm NO2, 0.01 ppm Cl2 conforming to IEC 60068-2-60
- **Continuous exposure to damp heat (in operation):** Ca: 10 days, 93 % RH, 40 °C (104 °F) conforming to IEC 60068-2-3
- **Continuous exposure to damp heat (in storage):** Ca: 56 days, 93 % RH, 40 °C (104 °F) conforming to IEC 60068-2-3
- **Exposure to cold (in operation):** Ab: - 25 °C (- 13 °F) conforming to IEC 60068-2-1
- **Exposure to cold (in storage):** Ab: - 25 °C (- 13 °F) conforming to IEC 60068-2-1
- **Exposure to dry heat (in operation):** Bb: 70 °C (158 °F) conforming to IEC 60068-2-2
- **Exposure to dry heat (in storage):** Bb: 70 °C (158 °F) conforming to IEC 60068-2-2
- **Influence of corrosion/gaz test 2 (in operation):** C: 21 days, 75 % RH, 25 °C (- 13 °F), 0.5 ppm H2S, 1 ppm S02 conforming to IEC 60068-2-60
- **Salt mist (in operation):** Kb/2 conforming to IEC 60068-2-52
- **Temperature variation with specified variation rate (in operation):** Nb: - 25 °C to 70 °C (- 13 °F to 158 °F) 5 °C/min (41 °F/min) conforming to IEC 60068-2-14

### Ambient air temperature for operation

- 25…70 °C
<table>
<thead>
<tr>
<th><strong>Offer Sustainability</strong></th>
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</thead>
<tbody>
<tr>
<td>Sustainable offer status</td>
<td>Green Premium product</td>
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<tr>
<td>REACH Regulation</td>
<td>REACH Declaration</td>
</tr>
<tr>
<td>EU RoHS Directive</td>
<td>Pro-active compliance (Product out of EU RoHS legal scope)</td>
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<td></td>
<td>EU RoHS Declaration</td>
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<tr>
<td>Mercury free</td>
<td>Yes</td>
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<tr>
<td>RoHS exemption information</td>
<td>Yes</td>
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<tr>
<td>China RoHS Regulation</td>
<td>China RoHS declaration</td>
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<tr>
<td></td>
<td>Product out of China RoHS scope. Substance declaration for your information</td>
</tr>
<tr>
<td>Environmental Disclosure</td>
<td>Product Environmental Profile</td>
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<tr>
<td>Circularity Profile</td>
<td>End of Life Information</td>
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